REMARKS

The Office Action of March 3, 2009, has been carefully studied. Claims 15-22 currently appear in this application. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration and formal allowance of the claims.

Claim Objections

Claim 18 is objected to because "alkal" should be --alkali--.

The present amendment makes this correction.

Art Rejections

Claims 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yazaki et al., US 6,580,005 in view of Mays, US 3,801,273.

This rejection is respectfully traversed.

The process claimed herein requires that the saponification reaction be conducted in a **water-immiscible** alcoholic reaction medium. Yazaki discloses decomposing PET in ethylene glycol, which is completely water miscible at all concentrations. Mays discloses that monoalcohols are interchangeable with many other alcohols, but Mays also teaches that the water solubility of the organic compounds must be such that they can form aqueous solutions of at least 2 percent by weight, although greater solubility is preferred, as is water miscibility (column 4, lines 42-52).

Rather than a method for recycling PET wastes, Mays discloses a process for recovering waste cellulosic fibers from a mixture of waste cellulosic fibers, waste polyester and/or acrylic fibers by heat treating the mixture of fibers at temperatures of 212-275°F for 45 minutes to five hours, in an aqueous treating solution containing an alkali metal hydroxide and a normally liquid organic compound. The method as disclosed by Mays, however, leads only to partial decomposition of the mixture, forming a jelly compound, the exact composition of which is unknown (column 4, lines 6-24 and lines 57-62). Therefore, it is necessary to subject the jelly to further treatment in order to complete the decomposition reaction and separate the cellulosic fibers, the polyester, etc., which involves additional steps in the process. The jelly must be rinsed to remove most of the alkali metal hydroxide and the organic compound, followed by a heat treatment of the jelly in a solution containing a neutral or alkaline oxidizing agent (column 5, lines 3-20). This is completely different from the herein claimed process in which PET hydrolysis is conducted with a strong base metal in a water-immiscible alcoholic medium.

There is no motivation for one skilled in the art to use the Mays 100% alkali hydroxide in the Yazaki method, as Mays requires the use of an oxidizing agent in order to recover the polyester. That is, one skilled in the art reading Mays would appreciate that even using 100% alkali metal hydroxide, there is still a second step required to decompose the PET, so there would be no motivation to substitute this for the sodium carbonate in Yazaki's one-step saponification process. Moreover, Yazaki discloses conducting he saponification reaction in ethylene glycol, which is completely miscible in water.

The present specification is clear that the alcohol must be water immiscible at page 6, line 26 to page 7, line 2. That is, in the embodiment claimed, when the alcoholic reaction media is immiscible in water, the separation stage comprises the following stages: (i) cooling the reaction mixture, (ii) adding sufficient water to the reaction media to dissolve the terephthalic acid salt, and (iii) a liquid-liquid separation phase. Therefore, it would not be obvious to use a process conducted in a water-miscible alcohol, such as Yazaki discloses.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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